

MPEG4 STAND-ALONE DVR

KPD-M Series



User's Manual

- Some system menu can be different from each model
- Some system menu is subject to change by firmware upgrade
- Please read this manual carefully before running DVR system



CAUTION

TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT OPEN COVERS.
NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Please beware of the following precautions before installing the DVR.

Avoid any place with moisture, dust, or soot.

Avoid any place with direct sunlight or heating appliances.

Keep the product away from electric shock or magnetic substances.

Avoid high or low temperature.

(Recommended operation temperature is between 0°C ~ 40°C).

Do not place any conductive material through the ventilation.

Turn off the system before installation.

Ensure enough space for cable connections.

Place the system on a solid surface with sufficient air ventilation.

Avoid any surface that vibrates.

Placing the system near electronic devices such as radio or TV may cause breakdown to the product.

Do not disassemble the product without assistance from the manufacturer.

Do not place any heavy object on the system.

NOTE

This equipment had been tested and found to comply with the limits for a CLASS A digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

PLEASE READ THIS MANUAL THOROUGHLY FOR EFFECTIVE AND SAFE USAGE OF THE DEVICE.

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KEY FEATURES

Operation

- Embedded LINUX OS
- Enhanced MPEG4 compression
- Display, Playback, Recording, Network transmission
- Real time single or multi-screen display
- Easy operation by IR remote controller
- Hidden camera option (covert)
- Easy firmware update by network and USB 2.0

Playback

- Multi-screen playback
- Search by time, event and calendar with go first/last function
- Simple playback – automatic download of viewer software at backup

Recording

- Recording resolution and quality level adjustable
- Recording frame rate can be set by user
- The recording speed of max. 120/100 images per second (NTSC/PAL)
- Continuous, manual, schedule and event (motion, alarm) recording
- Pre-alarm/post alarm recording
- Delete and lock/unlock recording video available
- 4 channel audio recording
- Alarm pop-up
- Event log view

Network

- Live, playback with viewer software and IE(Internet Explorer)
- Remote control via networked PC with the exclusive client viewer
- Supporting Static, DHCP, DDNS, PPPoE
- Multi-user connection available
- Live and Recording audio File play in network

KEY FEATURES

Audio

4 channel audio recording in real time

1 channel audio output

Backup

Remote backup on network PC with the exclusive client viewer

CD-RW (DVD-RW) backup

USB 2.0 backup(Both USB stick and USB connection HDD available)

General

Auto detection of video frequency(NTSC/PAL)

Built-in hardware Watchdog

S-Video output

Alarm In/Out, RS-485, RS-232 Connections

Loop-through connections

Multiple Languages

VGA output for PC monitor

UNIT PACKAGE



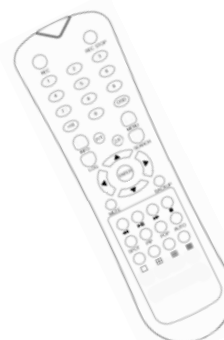
MPEG4 DVR System



Viewer Program/Manual



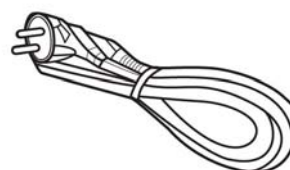
Install Guide



Remote controller



LAN cable



Power cord



Battery



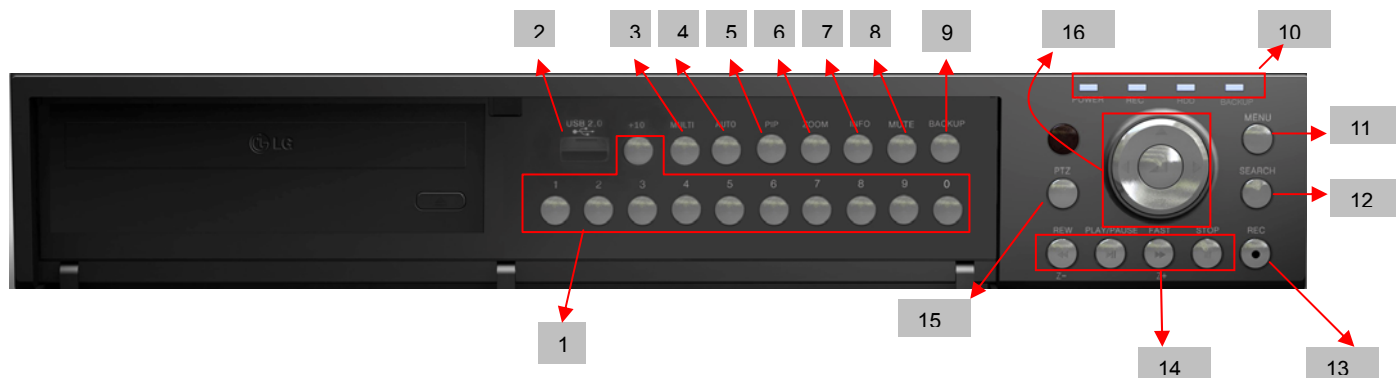
HDD screws



**DC adaptor
(DC12V 5A)**

BUTTON AND CONNECTION

1-1 FRONT PANEL



1. Channel Selection

You select a channel as full-size screen during live display or playback. When the number is above 10, please press the '+10' button at first and press other number.

2. USB 2.0 slot

It is used when you upgrade firmware update and backup video files.

3. MULTI

When you press the button repeatedly, you can change the screen display mode as you want from PIP to multi channel to single channel view.

4. AUTO

The function allows users to watch individual channels by rotating every channel in turn automatically. Please press the button again to stop it

5. PIP (Picture in Picture)

If you press the button, you can see a master channel and a slave channel on the master simultaneously. Press the button again, and master becomes slave and vice versa.

6. MUTE

You can turn off the audio.

7. INFO

INFO key shows system information of DVR only in live display mode.

8. OSD

If you do not need OSD, press the button. Pressing one more time retrieve the OSD.

9. BACKUP

You can backup video in CD-RW (DVD-RW) or USB (Memory stick and exterior HDD) in playback mode.

10. LED Lights

You can identify how power, record, HDD and network(NET) are.

11. MENU

You can change DVR settings. When you want to return to the previous step, press the button again.

BUTTON AND CONNECTION

12. SEARCH

You can choose the video file you want to find through this key.

13. REC

You can manually record by pressing the button. Press it once more, and you can stop recording.

14. Playback

REW (◀◀): Rewind the video (up to 128x)

PLAY/PAUSE (▶/||): Play and Pause the video

FAST (▶▶): Fast forward the video (up to 128x)

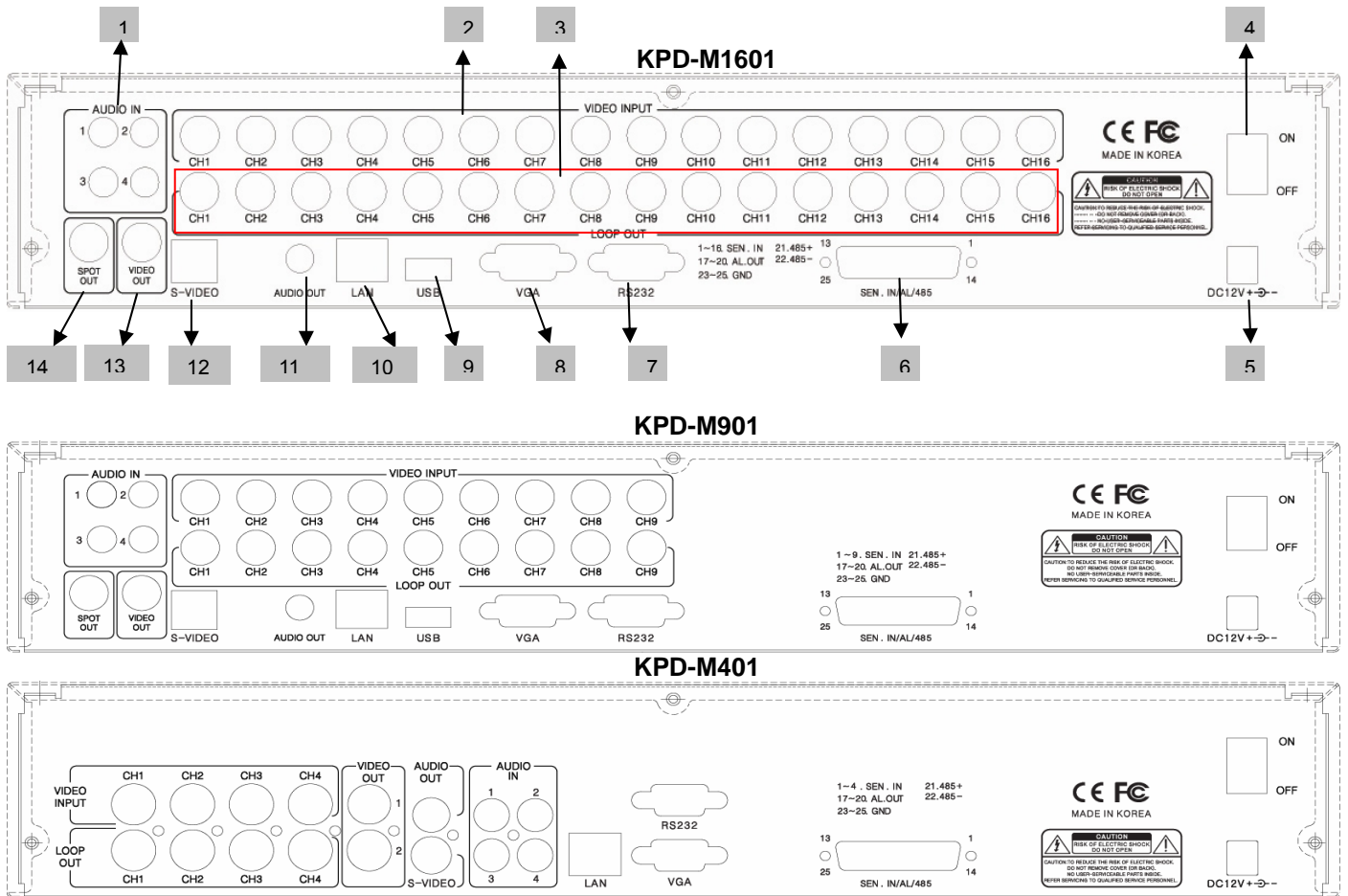
STOP (■): Stop the video.

15. PTZ

When you want to control speed dome cameras, please press the button.

16. Control keys

You can shift up, down, right and left and select what you want to.



RCA 4 channel audio inputs

Max 16 channel video inputs

Max 16 channel video loop outputs

Input: 100V~240VAC 50/60Hz 1.5A

Output: DC 12V, 5A

Sensor In: 16Ch(1~16), 9Ch(1~9), 4Ch(1~4)

17-20: Alarm Out, 21: 485+, 22: 485-, 23-25: GND

BUTTON AND CONNECTION

7. RS232

Connection port for engineering use only

8. VGA

VGA output connecting to LCD monitor

9. USB

USB 2.0 for system update and video backup

10. LAN

LAN connecting to a variety of networks

11. Audio Out

RCA 1 channel audio output

12. S-Video

Connecting to S-Video monitor

13. Video Out

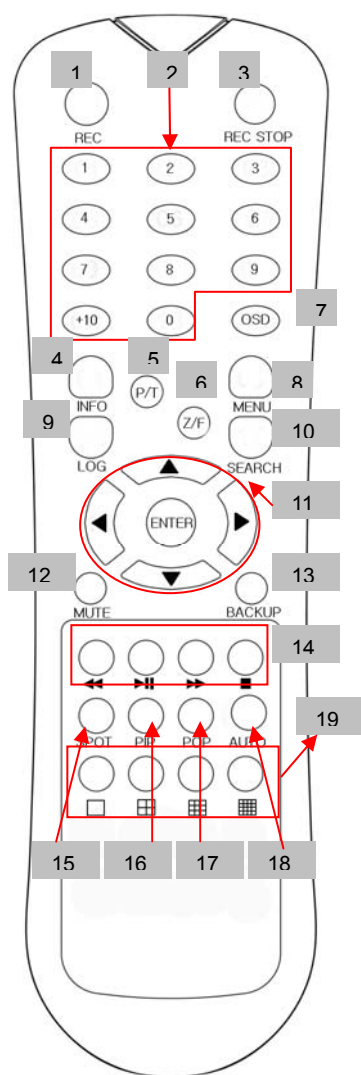
Connecting to monitor

KPD-M401: 2 outputs, KPD-M901/1601: 1 output

14. Spot Out (**KPD-M901/1601*)

Connecting to spot monitor

HDD INSTALLATION



1. REC (Record)

2. Channel Selection

You select a channel as full-size screen during live display or playback. When the number is above 10, please press the '+10' button at first and press other number.

3. REC STOP: Record stop button

4. INFO: DVR Information

5. P/T: Pan, Tilt

6. Z/F: Zoom, Focus

7. OSD: OSD on/off

8. MENU

9. LOG: Log list view

10. SEARCH

11. Direction keys(▲, ▼, ◀, ▶)

: Move cursor or control PTZF Camera

12. MUTE

13. BACKUP

14. Playback control keys

15. SPOT

16. PIP

17. POP

18. AUTO

19. Multi display modes

HDD INSTALLATION

1. Power on

Press power button on rear of the unit.



If system begins, loading message will appear. (It takes around 30seconds to boot DVR system)

2. Log in system

Enter your password (**Default : 0000**) to Log-in the system

ENTER PASSWORD



- a. To change your password, please refer **Page 23**.
- b. Administration password pops up when users press MENU button.

ENTER ADMIN PASSWORD

3. Record

Press REC button to record the video. If you press REC button once more, recording will be stopped.

BEFORE RECORDING, PLEASE CHECK!!

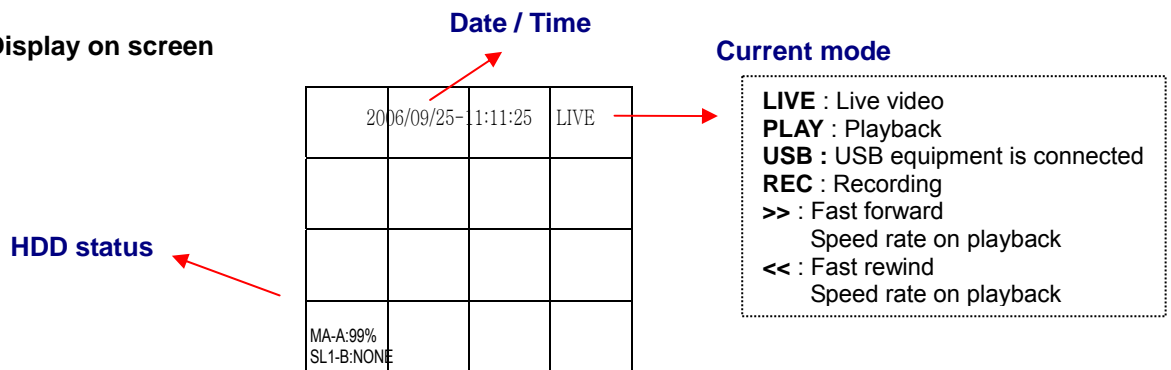
- (1) Check out whether the date and time are correctly set.
- (2) Check out whether HDD is formatted.
If HDD is not formatted, please format HDD.
→ Please refer **Page 27** to format HDD
- (3) Make sure that each camera screen displays properly.
- (4) Set up the camera channel name.
- (5) Select recording quality.
- (6) Select recording method.
- (7) Recording can be stopped by pressing REC button again. To keep recording, we recommend you to set recording mode in **"CONTINUOUS"**.

HDD INSTALLATION

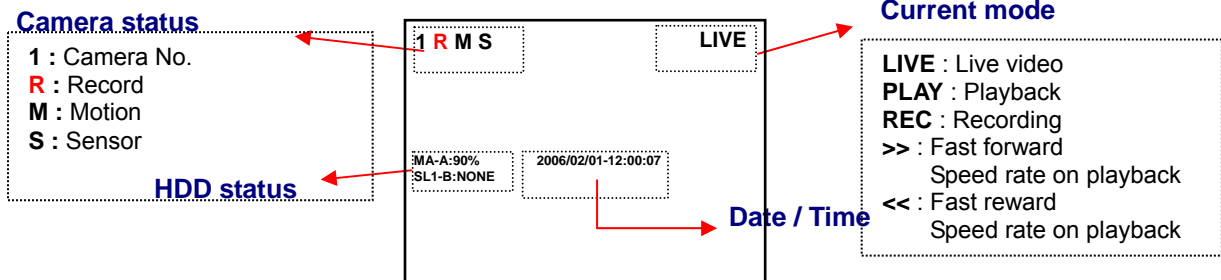
→ Please refer **Page 31**.

4. Live mode


4.1 Display on screen




4.2 Display of full screen mode




4-3. Quad screen (*Remote control)

To see quad screen when the full screen mode, press  button.


4-4. Full screen (*Remote control)

To see specific camera by full screen, press  button

4-5. 9ch display mode (*Remote control) * KPD-M901 / M1601

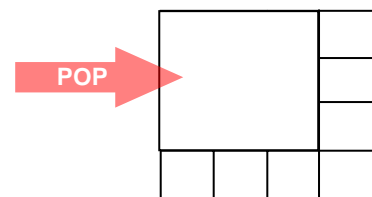
To see cameras by 9ch mode, press  button

4-6. 16ch display mode (*Remote control) * KPD-M1601

To see camera by 16ch mode, press  button

4-7. POP mode (*Remote control) * KPD-M901 / M1601

Press POP button to enlarge specific camera.
Whenever pressing POP button, go to next camera.



4-8. Auto Sequence (Auto)

- Interval display on the monitor before going to the next channel.
- the default time span from one channel to another is 2 seconds.
- User can select the range of time from 1 to 60 seconds.

HDD INSTALLATION



If you want to change interval time to rotate the camera, please go to 'MENU' and setup the interval time.

4-9. PIP

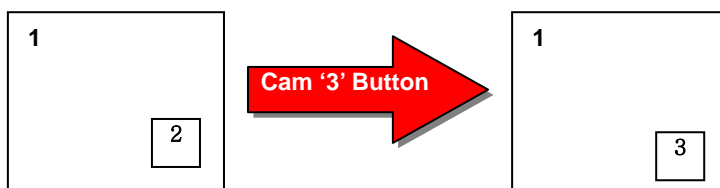
When it is in full screen display mode, you can see other camera in a small window.

- (1) Press PIP button of remote controller to go to PIP mode
- (2) If you press this button in PIP mode, the position of two cameras will be swapped.

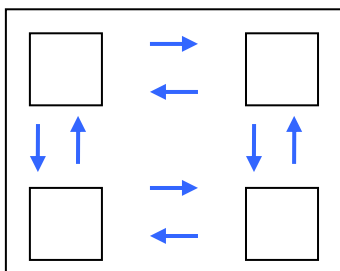


- (3) Press Camera button in PIP mode to change small screen to another camera.

Example)



- (4) Press Direction button to move small window at appropriate position.



HDD INSTALLATION

5. Search mode

(1) Press Search button

(2) Select Search method by using ▲▼ button and press 'ENTER' button

TIME SEARCH	Search data by Year /Month/Day/Time
EVENT SEARCH	Search only Data recorded by motion detection function
CALENDAR SEARCH	Search data in calendar
GO FIRST	Search from the top of the list
GO LAST	Search from the bottom of the list

[SEARCH]
* TIME SEARCH
* EVENT SEARCH
* CALENDAR SEARCH
* GO FIRST
* GO LAST

5-1. TIME SEARCH

[TIME-SEARCH]
YEAR : 0000
MONTH : 00
DAY : 00
TIME : 00:00

(1) If you select TIME SEARCH, Time Search table will appear

(2) Key in the year, month, day and time that you want to search for.

(3) Press the Enter key.

5-2. EVENT SEARCH

(1) If you select EVENT SEARCH, the calendar will appear.

(2) Select desired date by using ◀▶▲▼ button and press 'ENTER' button

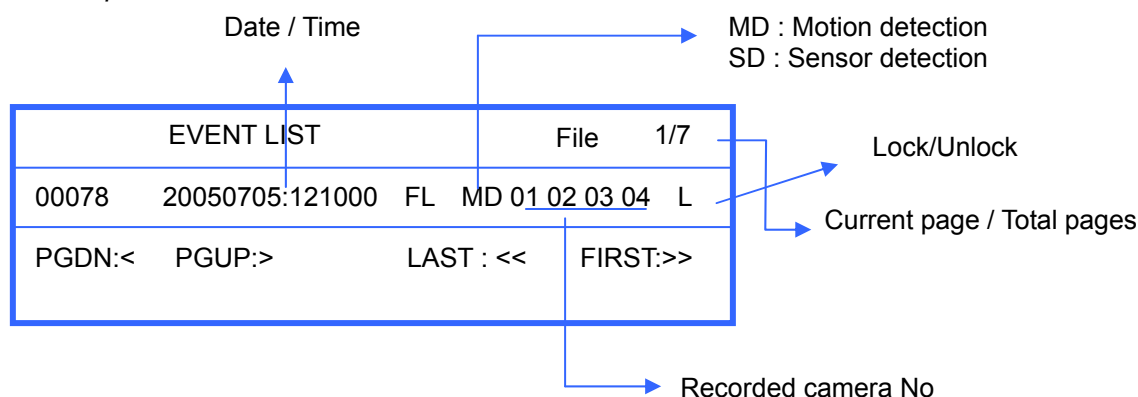
[CALENDAR-EVENT SEARCH]						
<<2006-09>>						
SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30



EVENT LIST	1/2
0013 060910:230233 FL MD 01 08 09	
0012 060910:225033 FL MD 01 07 09	
0011 060910:224233 FL MD 01 08 09	
0010 060910:223233 FL MD 01 08 16	
0009 060910:215233 FL MD 01 08 09	
0008 060910:213233 FL MD 01 08 09	
0007 060910:210233 FL MD 01 08 09	
PGDN:< PGUP:> LAST:<< FIRST:>>	

(3) Select desire video clip in the list by using ▲▼ button and press 'ENTER' button.

* The specifications of Event list



HDD INSTALLATION

5-3. CALENDAR SEARCH

- (1) If you select CALENDAR SEARCH, the calendar will appear.
- (2) Select desired date by using ◀▶▲▼ button and press 'ENTER' button
- (3) Select hour and minute that you want to search. The hour bar is divided into 24 sectors (unit of one hour), and the minute bar is done into 30 sectors (unit of two minutes).

<<2006-09>>						
SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30



[SEARCH-TIME]	
HOUR:	
MIN:	
TIME : 00:00:00	

5-4. GO FIRST

- (1) If you select GO FIRST, you can play back from the top file of the list to bottom.

5-5. GO LAST

- (1) If you select GO LAST, you can play back from the bottom of the list.

5-6. Playback

- If you press Play button in live mode, the video clip recorded recently will be played.
- If you want to see specific camera by full screen, press camera button.
- For display of quad mode from full screen, press quad button.
- You can control playback speed with ◀◀ / ▶▶ button. Once you press the

◀◀	REWIND / Frame by frame	- X2, X4, X8, X16, X32, X64, X128 - Reduce Fast Forward speed while Fast Forward play - Reverse playback frame by frame during PAUSE mode
▶I	PLAY / PAUSE	Play the video and pause the video
▶▶	FAST FORWARD / Frame by frame	- X2, X4, X8, X16, X32, X64, X128 - Reduce Fast Reward speed while Fast Rewind - Forward play frame by frame during PAUSE mode
■	STOP	Stop the playback and go to Live mode

HDD INSTALLATION

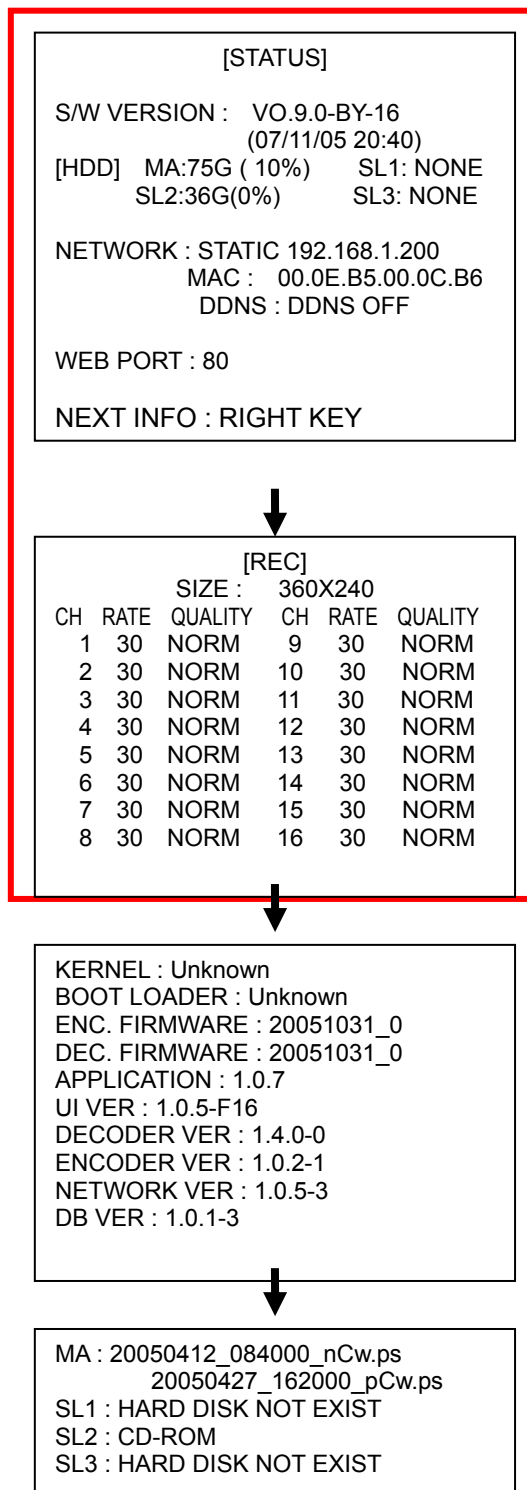
6. Function

6-1. INFO

Show the present status of DVR system

If you press direction button (▶), detailed information is shown.

(Normal information → REC information → S/W information → HDD information)



S/W VERSION	Software version
HDD	Indicate each HDD capacity and Used capacity
NETWORK	Indicate the information of Static or Dynamic IP address
MAC	Indicate DVR own MAC address
DDNS	Indicate the statue of DDNS service
[REC]	
SIZE	Recording resolution
CH	Camera No.
RATE	Statue of frame rate for recording
QUALITY	Indicate recording quality (BEST/HIGH/NORMAL/BASIC)

HDD INSTALLATION

6-2. MUTE



When you press MUTE key, AUDIO setup window appears. Press the enter key when you set mute mode or Audio on. FYI, Audio works only full screen mode.

[AUDIO]
STATUS : ▷ MUTE

6-3. BACKUP



User can backup the data to USB stick (USB HDD) or built-in CD (DVD)-RW.

- (1) Connect USB equipment to USB port of DVR system.
- (2) Press 'BACKUP' button.
- (3) Select a method and press 'ENTER' button.

[BACKUP]
MEDIA TYPE : ▷ CD-R
FILE FORMAT : ▷ NATIVE
BACKUP BASE : ▷ FILE
CHANNEL : ▷ ALL
[*] 1 [*] 2 [*] 3 [*] 4
[*] 5 [*] 6 [*] 7 [*] 8
[*] 9 [*] 10 [*] 11 [*] 12
[*] 13 [*] 14 [*] 15 [*] 16
START :
END :
TOTAL SIZE : 0M
BACKUP FORMAT MEDIA

MEDIA TYPE	CD-R CD-RW DVD-R DVD-RW USB MEMORY	① Select device to backup
FILE FORMAT	NATIVE	② Select backup file
BACKUP BASE	FILE TIME	③ Select backup type
CAMERA	ALL [,]1~[,]16	④ Select camera to backup
START	⑤ Start time to backup file	
END	⑥ End time to backup file	
TOTAL SIZE	⑦ Indicate total size to backup	
⑧ Select BACKUP and press 'ENTER' button		
⑨ In case of CD/DVD-RW, you can erase data in media by FORMAT MEDIA .		

6-4. PTZ (Pan / Tilt)

Press the PTZ button. Users can control PAN/TILT camera by direction button.

PTZF << CH: 01 >> << PAN >> << TILT >> << ZOOM >> << FOCUS>>
--



CH: 01	Press direction button to set the PTZ camera channel.
PAN	Press direction button to move camera up and down.
TILT	Press direction button to move camera right and left.
ZOOM	Press direction button to zoom in and out.
FOCUS	Press direction button to focus the video images.

HDD INSTALLATION

6-5. LOG LIST (*Remote controller only)

Show all information about what happened to DVR system during operation.

[EVENT LOG VIEW]

EVENT TYPE : ALL
MOTION : [.] SENSOR: [.]
ALARM : [.] V-LOSS : [.]
SYSTEM: [.] HDD : [.]
FILE : [.] DB : [.]
POWER : [.] NET : [.]
FROM: 2005-11-05 00:00
TO: 2005-11-05 23:59
OK CANCEL



① Select Log view type and press 'ENTER' button		
EVENT TYPE	ALL	Show all information
	PART	Show desired information
② Select desired sub-items and press 'ENTER' button when you choose "PART".		
FROM	③ Input desired start time	
TO	④ Input desired end time	
⑤ Select OK and press 'ENTER' button		

* Example of Log list

1234	060123:095436	MD	OOOOOOOOOOOO
No.	Event date / time	Event.	Detailed information



Event	Meaning	Description
MD	Motion Detection	Detect motion
SD	Sensor Detection	Detect sensor
VL	Video Loss	No video
SY	System	Change system setup
FL	File	Delete or Create a file
PW	Power	Power On / Off
NT	Network	Access system by network
HD	Hard Disk	Information of HDD
DB	Data Base	Information of data base

OPERATION

Tips for setup of DVR system

- (1) Press 'MENU' button to setup DVR system.
- (2) The window for password input will appear.
- (3) Enter your Password. **(Default : 0000)**
- (4) Select desired sub-menu item with Direction button.
- (5) Press 'ENTER' button to go to submenu or save system.
- (6) Press 'MENU' button to go to previous mode without save or escape system menu.
- (7) How to use text input dialog box when you need to input a text to system
 - 1) When text input dialog box appears, select desired alphabet and mark by Direction button.
 - 2) Press 'ENTER' button to input text.
 - 3) Then, the selected text will appear.
 - 4) Press 'MENU' button to quit dialog box.

[TEXT INPUT DIALOG]

A B C D E F G H I J

K L M N O P Q R S T

U V W X Y Z ←

a b c d e f g h i j

k l m n o p q r s t

u v w x y z . ~ / :

0 1 2 3 4 5 6 7 8 9

- _ @ SPACE

CH 01

The Table of MENU

MENU	SUB MENU		DESCRIPTION
1. SYSTEM	1-1.PASSWORD	1-1-1.ADMIN PASSWORD	Change system password for administrator
		1-1-2.USER PASSWORD	Change system password for user
		1-1-3.PASSWORD CHECK	Activate system password
	1-2.TIME	1-2-1.TIME SETUP	Setup current time
		1-2-2.TIME FORMAT	Setup time format
		1-2-3.TIME OSD FORMAT	Set TIME OSD color and position on screen
	1-3.PTZF PROTOCOL		Set PTZF cameras
	1-4.STORAGE		Format HDD / Overwrite setting
	1-5.CHANGE LANGUAGE		Change Language of Menu
	1-6.SOFTWARE UPDATE		Upgrade System Software
2. DISPLAY	1-7. DEFAULT SETUP		Set the system as to factoring default
	2-1.SEQUENCE DWELL(SINGLE)		Set switching time interval on Live full display
	2-2.SEQUENCE DWELL(GROUP) * 9/16ch		Set switching time interval on Live quad display
	2-3.CAMERA NAME		Input Camera name
	2-4.CAMERA STATUS		Show or Hide a specific camera
	2-5.CAMERA COLOR		Control the color of camera
	2-6.SPOT DWELL (SINGLE) * 9/16ch		Set switching time interval on full display of Spot

OPERATION

	2-7.SPOT DWELL (GROUP) * 9/16ch	Set switching time interval on quad display of Spot
	2-8.VGA FREQUENCY CHANGE	Change VGA frequency
	2-9.VIDEO STANDARD	Set the video standard
3. REC	3-1.REC PROPERTY	Set recording property (Resolution/Quality/Frame rate)
	3-2.REC OPTIONS	Set recording option (Continuous / DEINTERLACE / Water mark)
	3-3.EVENT REC	Set Motion / Sensor
	3-4.SCHEDULE REC	Set schedule recording
	3-5.DELETE REC	Delete record file
	3-6.LOCK/UNLOCK REC	Protect specific file from delete
	3-7.DELETE ALL REC	Delete all files
4. NETWORK	4-1.NETWORK TYPE	Set the present network system (Static / Dynamic)
	4-2.DDNS	Set network for DDNS
	4-3.NET PASSWORD	Assign password to access the DVR system by Net-client software
	4-4.NET CLIENT PORT	Assign port for port-forwarding in user's router
	4-5.NET CLIENT ID	Assign additional ID and password to access the DVR system by Net-client software
	4-6.NET DVR ID	For system check of net client when network connection
	4-7.NET CLIENT ADDR	Limit Client IP address to access DVR system * With only registered IP address, allow user to access DVR system
	4-8.NETWORK THROUGHPUT	Set the speed of data transmission in DVR system
5. SENSOR / SOUND	5-1.SENSOR TYPE	Set present network system (Static / Dynamic)
	5-2.ALARM MOTION MANAGER	Set Alarm output when motion is detected
	5-3.ALARM SENSOR MANAGER	Set Alarm output when sensor is detected
	5-4.ALARM BUZZER	Set Alarm buzzer ON/OFF
	5-5.ALARM OUTPUT	Set Alarm output ON/OFF to each camera
	5-6.ALARM OUT PERIOD	Set working time of Alarm output
	5-7.AUDIO	Set audio on designated channel

OPERATION

1. SYSTEM

1-1. PASSWORD

1-1-1. ADMIN PASSWORD



Admin password is for administrator. With this password, user can access to all menus of system. Password consists of only four digit numbers.

- (1) Enter new Password to change by using Number button.
- (2) Enter new Password again to confirm the Password.



1-1-2. USER PASSWORD

- (1) Enter new Password to change by using Number button.
- (2) Enter new Password again to confirm the Password.



1-1-3. PASSWORD CHECK

- (1) Select desire sub-menu to setup by using ▲▼ button and press 'ENTER' button
ADMIN : Access all system
USER : Only for logging on system

[CHECK PASSWORD]	
ADMIN :	ON
USER :	ON

[CHECK PASSWORD]	
-	OFF
-	ON

- (2) Select OFF or ON
ON : can access the system after confirmation of Password
OFF : can access the system without Password input

- (3) Press 'MENU' button to go to previous mode.



In case you forgot the passwords, please press the keys in the remote controller.

INFO->MUTE->SEARCH->■->■

When you press the keys in turn, you can see 'Factory Setup' mode to reset the password again. If the reset password works correctly, you have to set the DVR into the factory default in System menu.

OPERATION

1-2. TIME

1-2-1. TIME SETUP

(1) Select desired sub-menu by direction button and enter **Year / Month / Day / Time** by using Number button.

(2) New window will appear. Press 'ENTER' button to change time. If you really want to change, press Yes, otherwise No.

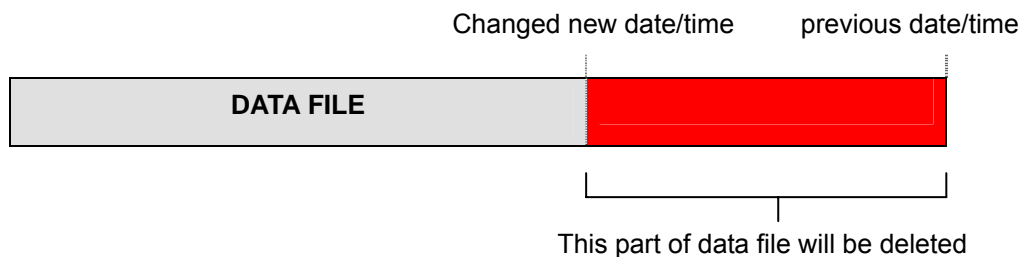
TIME SETUP	
YEAR	: 0000
MONTH	: 00
DAY	: 00
TIME	: 00:00



WARNING!!!	
TIME WILL BE CHANGED THE FILES AFTER CHANGED TIME WILL BE DELETED	
Are you sure?	
[ENTER] → YES, [MENU] → NO	



If you change the date/time to previous date/time, previous recorded data can be deleted as follows. **So, strongly recommended to backup data before changing time.**



1-2-2. TIME FORMAT

(1) Select desire TIME format by direction button and press 'ENTER' button.

[TIME FORMAT]
- YY / MM / DD
- DD / MM / YY
- MM / DD / YY

If the date is Dec 30 th 2006	
FORMAT	DISPLAY
YY/MM/DD	2006/12/30
DD/MM/YY	30/12/2006
MM/DD/YY	12/30/2006

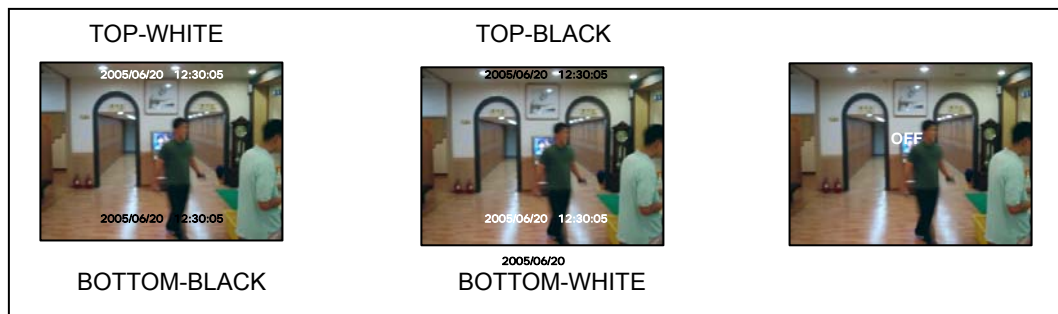
<Format description>

OPERATION

1-2-3. TIME OSD FORMAT

- (1) Select desire position and color of time format and press 'ENTER' button.

[TIME OSD FORMAT]
TOP-WHITE
TOP-BLACK
BOTTOM-WHITE
BOTTOM-BLACK
OFF



1-3. PTZF PROTOCOL

- (1) In PTZF protocol menu, select sub-item of desire camera and press 'ENTER' button to set

[PTZF PROTOCOL]					
CH	ID	PROTOCOL	BAUD	SPEED	
01	▷ 000	▷ PELCO_D	▷ 2400	▷ 9	<div style="border: 1px solid black; width: 20px; height: 40px; margin: 0 auto; position: relative;"> △ ▽ </div>
02	▷ 000	▷ PELCO_D	▷ 2400	▷ 9	
03	▷ 000	▷ PELCO_D	▷ 2400	▷ 9	
04	▷ 000	▷ PELCO_D	▷ 2400	▷ 9	
05	▷ 000	▷ PELCO_D	▷ 2400	▷ 9	
06	▷ 000	▷ PELCO_D	▷ 2400	▷ 9	

- (2) ID : Enter PTZF camera ID (From 000 to 255)

- (3) PROTOCOL : Select appropriate protocol.

* Available protocol: Pelco D, Pelco P, Chubb i SD, COP, LILIN, CYNIX, DSC230...

- (4) BAUD : Select appropriate BAUD rate

- (5) SPEED : Select desire speed for Pan tilt camera

- (6) Press 'MENU' button to finish the setting

1-4. STORAGE

1-4-1. OVER WRITE

[STORAGE]
OVER WRITE : ▷ YES
HDD-A : FORMAT
HDD-B : NONE
HDD-C : NONE
HDD-D : NONE

OVER WRITE
- NO
- YES

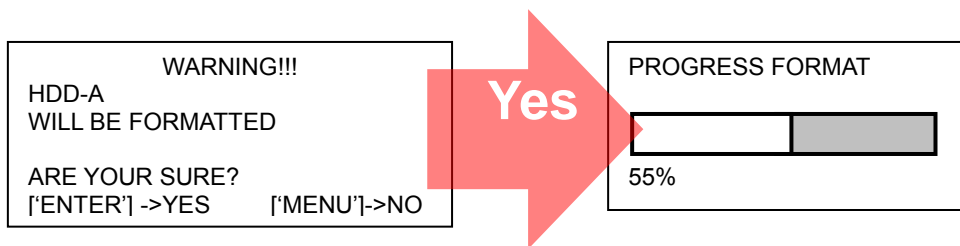
Select YES or NO
(When you choose YES, new video files can be overwritten on recorded ones.)

OPERATION

1-4-2. FORMAT



- When you install HDD in DVR system, you need to format HDD.
- Make sure that Format function will erase all data file in HDD, which is an unrecoverable command.
- Completing the formatting, the message ("DISK FORMAT COMPLETE") will appear. Press the MENU button, and it returns to STORAGE window. If there's more HDD to format, you can format them again. If not, press MENU button. DVR will reboot automatically.



When the HDD detection status is "N/F", recording function doesn't work. You have to format the HDD in N/F before recording.

1-5. CHANGE LANGUAGE

- (1) Press 'ENTER' button "Change Language".
- (2) Select desired language and press 'ENTER' button.

[CHANGE LANGUAGE]
ENGLISH
PORTUGUESE
RUSSIAN

1-6. SOFTWARE UPDATE

There are two methods to upgrade the DVR system.

USB UPDATE : Upgrade the DVR system by using USB memory stick.

NETWORK UPDATE : Upgrade the DVR system through Internet



After software update, user must turn DVR into Default values in SYSTEM.

1-6-1. USB UPDATE

[SOFTWARE UPDATE]
- NETWORK UPDATE
- **USB UPDATE**



[SOFTWARE UPDATE-USB]
WARNING
Firmware update will start !!!
Make sure the new firmware is in USB device.
Don't power off during firmware update
[ENTER] ->YES [MENU]->NO

- (1) Copy provided Firmware file to your USB memory stick

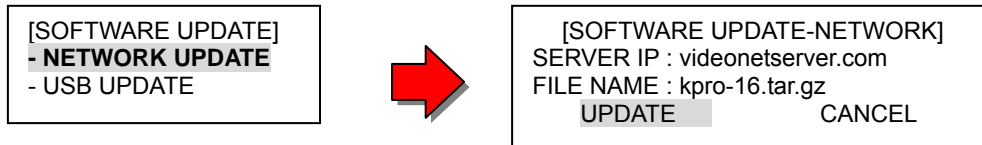


The firmware file should be in Root directory of USB memory

OPERATION

- (2) Connect USB memory stick to USB port in unit.
- (3) Press 'MENU' button and go to Software Update
- (4) Select USB UPDATE and press 'ENTER' button to proceed with software upgrade.
- (5) After completing upgrade, the system will reboot automatically.
- (6) Then, Check S/W version through INFO menu.

1-6-2. NETWORK UPDATE



- (1) Check the unit is connected to the Internet.
- (2) Press 'MENU button' and go to Software Update.
- (3) Check Server IP and File name whether it is correct to download. If it is wrong, select Server IP and File name and press 'ENTER' button to input new information by Text input Dialog box.



Make sure the information of Server IP & File name through your supplier.

- (4) Select 'UPDATE' and press 'ENTER' button to proceed with Software upgrade.
- (5) After completing upgrade, the system will reboot automatically.
- (6) Then, Check S/W version by press INFO button

1-7. SETUP DATA

KPD-M series supply users with another convenient function. In case users have to setup the menus of several DVR in the same modes, SETUP DATA function reduce the repeated labor by backing up and restoring the menu setup through USB.

1-7-1. BACKUP SETUP DATA

Users can backup the current menu setup for the other DVR menu setup.

1-7-2. RESTORE SETUP DATA

Users can restore the backed-up menu setup for the other DVR menu setup.

1-7-3. DEFAULT SETUP

BACKUP SETUP DATA
Connect USB-Memory and Press ENTER to continue [ENTER]->YES, [MENU]->NO

RESTORE SETUP DATA
Connect USB-Memory and Press ENTER to continue [ENTER]->YES, [MENU]->NO

[DEFAULT SETUP] WARNING Are You Sure? ['ENTER'] ->YES , ['MENU']->NO

OPERATION

Press 'ENTER' button to initialize the system in default setup mode.

2. DISPLAY

2-1. SEQUENCE DWELL(SINGLE)

- (1) In Sequence dwell menu, select desired Camera by using ▲▼ button and press ENTER button.

- (2) Input desired second by using number button and press 'ENTER' button to finish the setting.

[S.DWELL(SINGLE)]			
CH	SEC	CH	SEC
01	▷ 02	09	▷ 02
02	▷ 02	10	▷ 02
.....		
04	▷ 02	16	▷ 02



- Maximum time is up to 60 seconds.
- If you want to cancel, press 'MENU' button.

2-2. SEQUENCE DWELL(GROUP) * KPD-M901 / M1601

- (1) In Sequence dwell menu, select desired quad no. by using ▲▼ button and press 'ENTER' button.

- (2) Input desired second by using number button and press 'ENTER' button to finish the setting.

[S.DWELL(GROUP)]	
NO	SEC
01	▷ 03
02	▷ 03
03	▷ 03
04	▷ 03



- Can enter maximum up to 60 seconds
- If you want to cancel, press 'MENU' button.

Group No.	Camera
1	Channel 1 ~ Channel 4
2	Channel 5 ~ Channel 8
3	Channel 6 ~ Channel 9

[KPD-M901]

Group No.	Camera
1	Channel 1 ~ Channel 4
2	Channel 5 ~ Channel 8
3	Channel 9 ~ Channel 12
4	Channel 13~ Channel 16

[KPD-M1601]

2-3. CAMERA NAME

- (1) Select desired camera by using ▲▼ button and press 'ENTER' button.
- (2) TEXT INPUT DIALOG window will appear.
- (3) Enter desired camera name and press 'MENU' button to finish input

[CAMERA NAME]			
NO	NAME	NO	NAME
01	CH 01	09	CH 09
02	CH 02	10	CH 10
03	CH 03	11	CH 11
.....		
08	CH 08	16	CH 16

OPERATION

2-4. CAMERA STATUS

- (1) Select the camera and press 'ENTER' button in Camera status mode.
- (2) Select desire sub-item and press 'ENTER' button.

SHOW : Display the camera on monitor
HIDE : Not display the camera on monitor

[CAMERA STATUS]			
NO	STATUS		
01	▷ SHOW	09	▷ SHOW
02	▷ SHOW	10	▷ SHOW
03	▷ SHOW	11	▷ SHOW
04	▷ SHOW	12	▷ SHOW
.....		
08	▷ SHOW	16	▷ SHOW

[STATUS]
SHOW
HIDE



- Even if a camera is set in hide mode, the camera actually is recorded.
- Hidden camera won't be displayed on playback mode also.

2-5. CAMERA COLOR

- (1) Select a desired camera by direction button and press 'ENTER' button
- (2) Select desired item and Press ◀▶ button to 'ENTER' the value.



- ◀ button : - (decrease value): -125
- ▶ button : + (increase value) : -125

CHANNEL 1	
BRIGHT :	0
CONTRAST :	0
COLOR :	0
DEFAULT	
- :<	+ :>

- (3) Press 'ENTER' button to finish the setting. ('MENU' button : Cancel the setting)

[CAMERA COLOR]			
CH	COLOR	CH	COLOR
01	▷ DEFAULT	09	▷ DEFAULT
02	▷ DEFAULT	10	▷ DEFAULT
03	▷ DEFAULT	11	▷ DEFAULT
08	▷ DEFAULT	16	▷ DEFAULT

➔

[CAMERA COLOR]			
CH	COLOR	CH	COLOR
01	▷ ADJUST	09	▷ DEFAULT
02	▷ DEFAULT	10	▷ DEFAULT
03	▷ DEFAULT	11	▷ DEFAULT
08	▷ DEFAULT	16	▷ DEFAULT

2-6. SPOT DWELL(SINGLE) * KPD-M901 / M1601

- (1) Select desired Camera by using ▲▼ button and press ENTER button.
- (2) Input desired second by using number button and press 'ENTER' button to finish the setting.

[SPOT DWELL (SINGLE)]			
CH	SEC	CH	SEC
01	▷ 02	09	▷ 02
02	▷ 02	10	▷ 02
.....		
04	▷ 02	16	▷ 02



- Can enter maximum up to 60 seconds.
- If you want to cancel, press 'MENU' button.

OPERATION

2-7. SPOT DWELL(GROUP) * KPD-M901 / M1601

- (1) Select desired Camera by using ▲▼ button and press 'ENTER' button.
- (2) Input desired second by using number button and press 'ENTER' button to finish the setting.

[SPOT.DWELL(GROUP)]	
NO	SEC
01	▷ 02
02	▷ 02
03	▷ 02
04	▷ 02



- Can enter maximum up to 60 seconds
- If you want to cancel, press 'MENU' button.

Group No.	Camera
1	Channel 1 ~ Channel 4
2	Channel 5 ~ Channel 8
3	Channel 6 ~ Channel 9

[KPD-M901]

Group No.	Camera
1	Channel 1 ~ Channel 4
2	Channel 5 ~ Channel 8
3	Channel 9 ~ Channel 12
4	Channel 13~ Channel 16

[KPD-M1601]

2-8. VGA FREQUENCY CHANGE

- (1) Press 'ENTER' button in Change VGA freq.
- (2) Select desired video frequency.

[CHANGE VGA FREQ]
- 60HZ

[CHANGE VGA FREQ]
- 60HZ
- 50HZ

2-9. VIDEO STANDARD

- (1) Select your video system
- AUTO DETECTION** : Set video automatically.
- SWITCH** : Set video according to jumper on main board.
- NTSC** : Set video to NTSC system.
- PAL** : Set video to PAL system.

[VIDEO STANDARD]
▷ AUTO DETECTION
▷ SWITCH
▷ NTSC
▷ PAL



After changing Video standard, DVR system will reboot automatically

OPERATION

3. REC

3-1. REC PROPERTY.

Select desired item and press 'ENTER' button to change value.

[SETUP-REC-PROPERTY]					
REC RESOLUTION :			▷ 720X480		
CH	QUALITY	RATE	CH	QUALITY	RATE
01	▷ HIGH	▷ 2	09	▷ HIGH	▷ 2
02	▷ HIGH	▷ 2	10	▷ HIGH	▷ 2
03	▷ HIGH	▷ 2	11	▷ HIGH	▷ 2
.....				
08	▷ - HIGH	▷ 2	16	▷ HIGH	▷ 2

3-1-1. REC resolution

(1) Select desired resolution and press 'ENTER' button

RESOLUTION
- 720 X 480
- 720 X 240
- 320 X 240

3-1-2. Quality

(1) Select desired quality and press 'ENTER' button

QUALITY
- BEST
- HIGH
- NORMAL
- BASIC

3-1-3. Rate

(1) Select desired frame rate by ◀▶ button and press 'ENTER' button

[FRAME RATE]
0 1 2 4 8 15 30

(2) Non-available frame in each resolution mode will be indicated as Red color.

(3) Press 'MENU' button to save and go to previous mode.

3-2. REC OPTIONS

[REC OPTION]	
RECORD CONTINUOUS :	▷ OFF
PLAY DEINTERLACE	▷ ON
WATER MARK	▷ OFF

3-2-1. RECORD CONTINUOUS

ON : DVR system will record always. Cannot stop recording by manual operation.

OFF : DVR system will record in manual operation.

[REC CONTINUOUS]
- ON
- OFF



If REC-CONTINUOUS IS **OFF**, anybody can stop recording by record stop button. So, recommended to set **REC-CONTINUOUS** mode to **ON**.

OPERATION

3-2-2. PLAY DEINTERLACE

When displaying playback recorded by 720X480 resolution through analog monitor, there can be flickering of image. With this function, you can see smooth display.

[PLAY DEINTERLACE]
- ON
- OFF

3-2-3. WATER MARK

With this function, users can protect recorded data not to modify image. If there is any attempt to modify the video, the video cannot be played.

[WATER MARK]
- ON
- OFF

3-3. EVENT REC

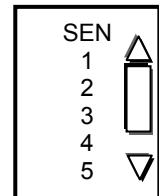
[EVENT]
- MOTION DETECTION
- SENSOR DETECTION
- OPTIONS

3-3-1. MOTION DETECTION

[EVENT REC(M/D)]					
NO	SEN	AREA	NO	SEN	AREA
01	▷0	▷OFF	09	▷0	▷OFF
02	▷0	▷OFF	10	▷0	▷OFF
03	▷0	▷OFF	11	▷0	▷OFF
	
08	▷0	▷OFF	16	▷0	▷OFF

(1) Select desired camera to set motion detection and press 'ENTER' button

- **SEN** : Adjust sensitivity of motion. Enter sensitivity value from 0 to 9 by number button.



Sensitivity rate : 0(Low) <1<2.....<8<9(High)

- **AREA** : Adjust the area of motion

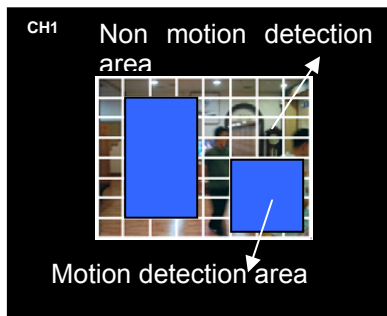
.ALL : select all area

.PART : Select desired area.

.OFF : Quit motion detection function.

[AREA]
- ALL
- PART
- OFF

OPERATION



If you select 'part' of specific camera, the screen will change to set like side picture. Select desire area with direction button and press 'ENTER' button to select area. To cancel the selected block, press 'ENTER' button one more.

3-3-2. SENSOR DETECTION

Select desire position and press 'ENTER' button.

- ☒ : Sensor detection ON
- ☐ : Sensor detection OFF

[EVENT REC(S/D)]																
CH	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
S 01	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S 02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S 03	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
S 04	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Camera No. 11 is recorded.

Example)
If Sensor No.2&3 is detected,

3-3-3. OPTIONS

Set recording options when event happens.

[EVENT-OPTIONS]	
POST-RECORD TIME :	▷ 10SEC
PRE-RECORD TIME :	▷ 4SEC
POP-UP SCREEN :	▷ ON

3-3-3-1. POST-RECORD TIME

; Set recording time after Event occurs

[POST REC TIME]
- 10SEC
- 30SEC
- 1 MIN
- 5 MIN
- 10MIN

3-3-3-2. PRE RECORD TIME

; Set recording time before Event occurs

[PRE REC TIME]
- NO PRE REC
- 2SEC
- 4SEC
- 6SEC
- 8SEC
- 10SEC

OPERATION

3-3-3-3. POP UP

ON : When event happens in specific camera, the camera will be popped up.

OFF : The popup function is off.

[POP UP SCREEN]

- ON
- OFF

3-4. SCHEDULE REC

Users can set up the schedule recording on desired channel, date and time.

(1) Select desired camera to record by schedule and press 'ENTER' button.

[SCHEDULE REC]

CH

01

02

03

04

ALL

(2) Select desire position for a day of week & time and press 'ENTER' button

- ☒ : RECORDING
- ☐ : NOT RECORDING

Example) System will record from 06:00 to 07:00 in whole week.
If you select specific time of "ALL DAY", the specific time of whole week will be marked.

[SCHEDULE: CH-1]

	1												2											
	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3
SUN	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MON	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TUE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
WED	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
THU	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
FRI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SAT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
DAY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Example) System will record from 10:00 to 14:00 on Tuesday

OPERATION

3-5. DELETE REC

- (1) Select desired data clip and press 'ENTER' button.
- (2) New window announcing WARNING will appear.
- (3) Press 'ENTER' button to delete selected data clip. ('MENU' button : cancel)

```
FILE LIST - DELETE      1/105
0338 20050806_125000 600S D L W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
PGUP: < PGDN: > LAST: << FIRST: >>
```

```
[WARNING!!!]
DELETE FILE
0338 20050806_125000 600S D U

ARE YOU SURE?
['ENTER']→YES  ['MENU']→NO
```

3-6. LOCK / UNLOCK REC



You can preserve some desired data with this function. The locked data will be marked to 'L' and will not be erased on overwriting of HDD.

- (1) Select desired file to protect and press 'ENTER' button.

```
FILE - LOCK/UNLOCK      1/105
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D L W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
0338 20050806_125000 600S D U W
PGUP: < PGDN: > LAST: << FIRST: >>
```

→ Protected file

3-7. DELETE ALL REC

- (1) Press 'ENTER' button to delete all data ('MENU' button : Cancel)

```
[WARNING!!!]
ALL RECORDED FILE
WILL BE DELETED

ARE YOU SURE?
['ENTER'] -> YES  ['MENU'] -> NO
```



You can't delete files while recording. Please stop recording if you delete files.

4. NETWORK

4-1. NETWORK TYPE

- (1) Select network type according to your network system.

- **STATIC** : Static IP
- **DYNAMIC** : Dynamic IP
- **PPPOE** : when your system is connected to ADSL modem

NETWORK TYPE
STATIC
DYNAMIC
PPPOE

- (2) STATIC IP

- 1) Enter IP ADDRESS / GATEWAY / SUB-NETMASK by using number key
- 2) Press 'ENTER' button to save.

[STATIC IP]
IP ADDRESS
XXX.XXX.XXX.XXX
GATEWAY
XXX.XXX.XXX.XXX
SUB-NETMASK
XXX.XXX.XXX.XXX

- (3) DYNAMIC IP

- 1) If you select Dynamic IP, system will detect IP address automatically and show IP information.

[DYNAMIC IP]
IP ADDRESS
XXX.XXX.XXX.XXX
GATEWAY
XXX.XXX.XXX.XXX
SUB-NETMASK
XXX.XXX.XXX.XXX

- (4) PPPOE (for ADSL)

; If your network system is ADSL, you need to enter your ID (NAME) and password (AUTH) to access Internet. If you don't know your ID & Password, please ask your ISP supplier of your ID & Password.

[PPPOE]
NAME : XXXX
AUTH : XXXXX

OPERATION

4-2. DDNS



- This is for user who is using dynamic IP. With this function, user can use dynamic IP like static IP
- This system supports two website at www.dyndns.org and www.ipupdater.com
- For details, please refer network manual.

[DDNS] DOMAIN : USER ID : GROUP ID : PASSWORD : ACTIVATE : <- NO>
--

Domain : input your domain name of DDNS website
User ID : input your ID of DDNS web site
Group ID : input your group ID of DDNS web site
PASSWORD : input password of DDNS web site
Activate : Select website that you registered to activate DDNS function.

ACTIVATE
NO videonet.co.kr

Example)

[DDNS] DOMAIN : kpro.dyndns.org USER ID : kpro GROUP ID : XXXXX PASSWORD : 1234 ACTIVATE : videonet.co.kr
--

4-3. NET PASSWORD

- (1) Enter new NET Password to change by Number button.
- (2) Enter new NET Password again to confirm the Password.

[PASSWORD] 'ENTER' NEW NETWORK PASSWORD : _ _ _ _

[PASSWORD] CONFIRM NEW NETWORK PASSWORD : _ _ _ _

4-4. NET CLIENT PORT

- (1) Press 'ENTER' button in net client port mode.
- (2) Select desire port rate and press 'ENTER' button
- (3) Press 'MENU' button

[CLIENT PORT] PORT AREA : ▷ 7620-7624 PORT1(LOGON) : 07620 PORT2(CONTROL) : 07621 PORT3(LIVE) : 07622 PORT4(PLAY) : 07623 POR51(BACKUP) : 07624	PORT AREA -7620-7624 -7630-7634 -7640-7644 -7650-7654 -7660-7664
---	---

OPERATION

4-5. NET CLIENT ID

- (1) Press 'ENTER' button to input ID & Password in net client ID mode.
- (2) Enter name by TEXT INPUT DIALOG and press 'MENU' button when you finish.

[CLIENT ID]	
LOGIN-ID	PASSWORD
1	:
2	:
3	:
4	:

4-6. NET DVR ID

- (1) Press 'ENTER' button to input ID in net DVR ID mode.
- (2) Enter name by TEXT INPUT DIALOG and press 'MENU' button to save.

[DVR ID]
ID:



- This function is for system check when network connection.
- It's not necessary to set this menu for network connection.

4-7. NET CLIENT ADDR

- Enter IP address by using number key to register IP address that can access to the system.



Can register maximum 10 IP address to access the system.

[CLIENT IP]	
CLIENT IP 01:	000.000.000.000
CLIENT IP 02:	000.000.000.000
CLIENT IP 03:	000.000.000.000
CLIENT IP 04:	000.000.000.000
CLIENT IP 05:	000.000.000.000
CLIENT IP 06:	000.000.000.000
CLIENT IP 07:	000.000.000.000
CLIENT IP 08:	000.000.000.000
CLIENT IP 09:	000.000.000.000
CLIENT IP 10:	000.000.000.000

4-8. NETWORK THROUGHPUT

- (1) Press 'ENTER' button.
- (2) Then, sub-menu will appear.
- (3) Select desire speed rate and press 'ENTER' button.

[NETWORK-THROUGHT]	
THROUGHPUT : ▷ UNLIMITED	

[THROUGHPUT]	
UNLIMITED	▲
64K	
128 K	
256 K	
512 K	
1 M	▼
2 M	
4 M	
10 M	

4-9. WEB PORT

When remote-access with Web-browser, default web-port is port # 80, but you can assign you own specific web-port, such as port 8080 or 1080, as an Web port.

Enter Number (0000~9999)
0000

OPERATION

5. SENSOR / SOUND

5-1. SENSOR TYPE

- (1) Select connected sensor No. and press 'ENTER' button.
- (2) Select Sensor type and press 'ENTER' button.

[SENSOR TYPE]			
SENSOR 1	▷ NO	SENSOR 9	▷ NO
SENSOR 2	▷ NO	SENSOR10	▷ NO
SENSOR 3	▷ NO	SENSOR11	▷ NO
.....			
SENSOR 8	▷ NO	SENSOR16	▷ NO

TYPE

NC

NO

5-2. ALARM MOTION MANAGER

; If camera detects motion, designated alarm will output.

- (1) Select Camera no & Alarm no and press 'ENTER' button.
- (2) Press 'MENU' button to save.

[MOTION MANAGER]																
	1															
CHANNEL	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
ALARM 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALARM 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALARM 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALARM 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALL ALARM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

■ : Alarm out ON
□ : Alarm out OFF

If Motion is detected at Camera No.11, Alarm No 2,3 will output

5-3. ALARM SENSOR MANAGER

; If sensor is detected, designated alarm will output.

- (1) Select Sensor no & Alarm no and press 'ENTER' button
- (2) Press 'MENU' button to save

[SENSOR MANAGER]																
	1															
SENSOR NO	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
ALARM 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALARM 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALARM 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALARM 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ALL ALARM	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

● ■ : Alarm out ON
● □ : Alarm out OFF

If Sensor No.11 is detected, Alarm No 2,3 will output

OPERATION

5-4. ALARM BUZZER

ON : Alarm buzzer is working when sensor signal is detected.

OFF : Buzzer OFF.

[BUZZER OUTPUT]	
- ON	<input checked="" type="checkbox"/>
- OFF	<input type="checkbox"/>

5-5. ALARM OUTPUT

- (1) Select desire Alarm no and press 'ENTER' button
- (2) Select ON or OFF and press 'ENTER' button

[ALARM OUTPUT]					
ALARM 1	▷	OFF	ALARM 3	▷	ON
ALARM 2	▷	ON	ALARM 4	▷	ON

[ALARM OUTPUT]	
ON	<input checked="" type="checkbox"/>
OFF	<input type="checkbox"/>

5-6. ALARM OUT PERIOD

- (1) Press 'ENTER' button in Alarm out period mode..
- (2) Select desire period of alarm out and press 'ENTER' button

[ALARM OUT PERIOD]	
30 SEC	<input checked="" type="checkbox"/>
01 MIN	<input type="checkbox"/>
03 MIN	<input type="checkbox"/>
10 MIN	<input type="checkbox"/>
CONTINUOUS	<input type="checkbox"/>

5-7. AUDIO * KPD-M901/M1601

Select the channel connected to audio and press 'ENTER' button.

[AUDIO]																				
		1																		
CHANNEL	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6				
AUDIO 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
AUDIO 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
AUDIO 3	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				
AUDIO 4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

Audio1 → Channel 1

Audio2 → Channel 2

Audio3 → Channel 3

Audio4 → Channel 4

HDD INSTALLATION



1. Unscrew the top cover of DVR.



2. Assemble hard disks and HDD bracket the same as the picture. Please be noted that that bracket has front and rear. You must put HDD in right direction.



3. Install the HDDs assembled in the bracket at the designated spot.



The cables connected to the front board should be under the HDD bracket.



4. Connect the HDDs to mainboard with gray cable. The connector outside the mainboard is for HDD.



Before installing the Hard Disk Drives, please read the jumper setting information on the label. If the jumper is not set properly, the system will be disordered.



5. Make sure that the HDDs are set to "Master" & "Slave" properly and cover the top.



*** Check if HDD has no problem after HDD installation because record function may not work well due to HDD problem.**

*** It may reboot automatically when HDD has problems or it doesn't detect HDD.**

*** Contact your local distributor and exchange with new one when you find your HDD has a problem.**

TROUBLE SHOOTING

In the event of a product malfunction, please check the list below for a possible solution before requesting service.

Problem		Explanation / Solution
Power	No power	✓ Check that the power plug is connected to a wall outlet and a SMPS
Video	No Video or the Video is back screen	✓ Check the video input / output connections on the product rear panel ✓ Check the camera / the camera video/power cable connections ✓ Check if Camera status in menu is SHOW → Refer to Page 18
	Not display camera name	✓ Camera name is shown only in full screen mode.
Audio	No Audio but Video is O.K during monitoring /	✓ Check the audio input / output connections on the product rear panel
	No Audio but Video is O.K during playback	✓ Audio works only in full screen mode
Playback	Can't stop recording by remote controller	✓ Check RECORD CONTINUOUS of REC OPTION of MENU is OFF
	Can't find previous recording data	✓ The product operates automatically OVERWRITE function. It deletes previous recording data to overwrite when HDD is full.
Backup	Not compatible with USB memory stick	✓ Please check if USB memory stick has protection(Password) function. USB memory stick should not have protection function.
Network	Can't connect by network	✓ Check if network of menu is setting correctly ✓ Check if your internet line is available. Please ask your service provider to check internet line

If the problem you are experiencing persists or is not mentioned above, please contact service center or your local distributor.